WHAT IS CLAIMED IS:

1. A method for increasing a time dependent dielectric breakdown lifetime of a semiconductor device having a first layer underlying a second layer, the method comprising:

forming a glue layer on the first layer;

performing an inter-treatment on the glue layer, wherein the inter-treatment improves an interface between the glue layer and the first layer; and

depositing the second layer onto the inter-treated glue layer.

2. The method of claim 1 further comprising performing a pre-treatment on the first layer before forming the glue layer.

3. The method of claim 1 wherein performing the inter-treatment on the glue layer includes applying a plasma to the glue layer.

4. The method of claim 3 wherein applying the plasma to the glue layer further includes selecting a reacting gas, a process time, a process temperature, a process pressure, and a reacting gas flow.

5. The method of claim 4 wherein the selected reacting gas is a hydrogen based gas.

6. The method of claim 4 wherein the selected reacting gas is a helium based gas.

7. The method of claim 4 wherein the selected process time is between approximately 1 and 100 seconds, the selected process temperature is between approximately 200 and 400° C, the selected process pressure is between approximately 0.5 and 10 torr, and the selected reacting gas flow is between approximately 100 and 2500 sccm.

8. The method of claim 1 wherein performing the inter-treatment on the glue layer includes directing an electron beam towards the glue layer.

9. The method of claim 8 wherein directing the electron beam towards the glue layer further comprises defining a process power and a dosage.

10. The method of claim 9 wherein the process power is between approximately 1000 eV and 8000 eV.

11. The method of claim 9 wherein the dosage is between approximately 50 and 500 $\mu C/cm^2$.

12. A method for increasing a dielectric breakdown lifetime of a semiconductor device, the method comprising:

depositing a dielectric layer;

depositing a glue layer on the dielectric layer;

selecting either a plasma treatment process or an electron beam treatment process; and

applying the selected treatment process to the glue layer, wherein the treatment process enhances an adhesiveness of the glue layer and the dielectric layer.

13. The method of claim 12 further comprising selecting a thickness for the glue layer, wherein the selected thickness is based at least partially on a desired electrical property of the glue layer.

14. The method of claim 13 further comprising adjusting a property of the selected treatment process based on the selected thickness of the glue layer.

15. The method of claim 14 wherein the adjusted property is associated with a duration of the selected treatment process.

16. The method of claim 12 further comprising selecting a glue for the glue layer, wherein the glue is selected from the group consisting of SiN, silicon oxide, SiCH, SiCN, and SiCO.

17. The method of claim 12 wherein the selected process is the plasma treatment process, and wherein a reacting gas to be used in the plasma treatment process is selected from the group consisting of a hydrogen based gas and a helium based gas.

18. A damascene structure having an increased time dependent dielectric breakdown lifetime, the structure comprising:

a first layer, wherein the first layer is at least partially formed from a dielectric material;

a treated glue layer adhering to the first layer, wherein the adhesiveness of the glue layer is due in part to a treatment performed on the glue layer prior to the deposition of any layer above the glue layer; and

a second layer formed on the glue layer.

19. The damascene structure of claim 18 wherein the glue layer includes an electrical property, and wherein the electrical property is determined by a density of the glue layer due to the density's effect on the treatment.

20. The damascene structure of claim 18 further comprising an adhesive layer underlying the first layer.